

ENTOMOLOGICAL ITEMS.

OMISSION.—Owing to the length of our leading articles the Bibliographical record will be omitted from this numero of PSYCHE.

MR. C: H: T. TOWNSEND has gone from the War department, Adjutant general's office, to the U. S. Department of agriculture, Washington, D. C., which is his present address.

PLATYPSYLLA SURELY COLEOPTEROUS.—Drs. G: H: Horn and C: V. Riley, working independently, have studied the larva of *Platypsylla castoris*, and state that the larval characters fully prove that the insect is coleopterous.

DR. G: H: HORN visits Europe again this season. The Doctor needs this recreation and we know he will bring back with him fresh energy that will enable him to continue his valuable work. His address will be: Care of Dr. D. Sharp, Shirley Warren, Southampton, England. The Doctor will leave May 9th and will be gone all summer.—*Entom. americana*, May 1888, v. 4, p. 36.

A CURIOUS MITE.—A species of *hydrachnidæ*, found by Dr. Otto Zacharias in a little mountain stream, the Iser, in northern Germany, and known, on account of its large dermal glands, as *sperchon glandulosus*, has been found lately in the fresh waters of the Azores, by Prof. Barrois, of Lille, France.—Dr. Zacharias calls attention, in the *Monatliche Mittheilungen aus dem gesamtgebiet der naturwissenschaften* (Dec. 1887, jährg. 5, p. 215), to the curious fact that in both these distant localities this species is found only in such ponds and streams as have a temperature of 15-15.5° C.

ANT-INHABITED PLANTS.—Hernandez, about the middle of the seventeenth century, described the stipular thorns of *Acacia cornigera* of Central America, into which certain ants eat, feed upon the pulpy interior, and live in the dwelling thus made. Such inhabited thorns grow larger and distorted,

and the ants seem to pay for their hospitality by protecting the tree from other marauding insects. Two woody *Rubiaceæ* of Sumatra were described in 1750 by Rumphius, as inhabited by ants. They are both epiphytic and attached to the host tree by a large tuberous base, which is cavernous and occupied by ants. The ants, by their irritating presence, cause the tuberous growth to enlarge, but the enlargement begins during germination before the ants attack it—an instance of a plant preparing beforehand for expected guests. It is said that seedling plants which fail to become inhabited, perish. Dr. Gray, in a review, says that “it is most supposable that this extraordinary formation was acquired gradually; that the normally fleshy caulicle of the ancestral plant, made a nidus for an insect, developed under the disturbing stimulus somewhat as a gall develops, until at length, the tendency became hereditary, and the singular adaption of plant to insect was established.”—*Botan. gazette*.

PHOTOGRAPHS OF COBWEBS. Mr. Horace P. Chandler of Boston has made a very successful photograph of an *Epeira* web by taking it early in the morning while it was covered with dew. A copy of this photograph is in the collection of the Boston Society of Natural History. The web hangs between the branches of a spruce tree and looks like that of *Epeira triaranea* though unfortunately the spider was not preserved for identification.

Amateur photographers can render good service by further experiments in this direction, taking care, each time, to preserve the spider in alcohol with a complete record of time, place and surrounding.

The following webs are good subjects for photography and often hang in convenient places: all the flat, round webs made by *Epeira* and its allies the web of *Linyphia marginata*, which consists of a flat dome three or four inches in diameter, held up by an irregular mass of web, extending upward

into the bushes sometimes a foot or more; also that of *L. communis* which consists of two sheets of web slightly curved downwards and supported in the same way by an irregular mass of web; several species of *Theridium* spin a web consisting of a little tent surrounded by irregular threads under branches of trees; the triangular web of *Hyptiotes cavatus* among the dead lower branches of pine trees; the small webs of *Dictyna* on the ends of dry weeds, and those of *Agalena naevia*, flat on grass with a tube leading out from one corner.

James H. Emerton.

FATAL SPIDER BITES.—The following is extracted from Mr. J. B. Smith's report of the meeting of the entomological society of Washington, for 1 March 1888, as given in *Entomologica americana* (May 1888, v. 4, p. 40):

"Prof C. V. Riley presented a paper entitled, 'A contribution to the literature of fatal spider bites,' giving details of a case in which death resulted from the bite of a spider, presumably *Latrodectes mactans*. Also details of another case in which the patient recovered from a bite of the same spider. Prof. Riley reviewed the literature of the subject at some length, and concludes that personal idiosyncrasy is a large factor in these cases and that the poisonous secretion of spiders affected different individuals in a very different manner, and hence the discrepancy in results. Mr. Otto Lugger related an experience of his own with *Phydippus tripunctatus*, L., which bit one of his children. The result was convulsions, high fever, headache, swollen eyes and great pain in the pit of the bitten arm. In about three days all inflammation and untoward symptoms had disappeared. Dr. Marx states that the secretion in which *Latrodectes mactans* envelops its victims when taken internally had the effect of increasing the pulse from 72 to 120. He commented on the case, but rather skeptically: he cannot see how *Latrodectes*, with its minute, soft mandibles, can possibly pierce the skin or contain poison

enough to produce the violent effects recorded."

VALUE OF PRIVATE COLLECTIONS. — At the end of some sensible remarks in answer to the question "What is the logical *raison d'être* of a collection of lepidoptera?" Mr. F. H. P. Coste, in an article entitled "On collections of lepidoptera" (*Entomologist*, Apr. 1887, v. 20, p. 93-96), adds:

"I should still advocate the collecting of insects by boys: their time is less valuable, and they find it a delightful amusement, and learn to know all our commoner insects, their haunts, and their classification; whilst, as they grow older, they slide gradually from collecting into scientific entomology. Herbert Spencer says: The practice of breeding larvae, 'when joined with the entomological collection, adds immense interest to Saturday afternoon rambles, and forms an admirable introduction to the study of physiology.'"

Mr. Coste rightly enough concludes that the collection and preservation of insects by so many individuals is a waste of time, from a scientific standpoint, and that much of the knowledge gained from maintaining a large private collection can be obtained as well by visits to a museum.

This abolition of his collection or confining it rigidly to some limited specialty or group of insects would leave the individual free to study particular subjects in entomology, and really to contribute to knowledge, instead of wasting time in pinning, setting and caring for a large collection, much of which is made up of a duplication of specimens found in abundance in museum collections. The application of the principles of division of labor in the work of the entomologist is becoming as important as it is in mechanical work, and the drudgery of preserving large collections ought to be left to museums, where it can be done better and at less real expense than by individual entomologists. G: D.

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